

## Japan Automotive Hydraulic Actuators Market

The <u>Japan automotive hydraulic actuators</u> market size is projected to expand at a CAGR of 8.6% during the forecast period, 2021-2028. The growth of the market is attributed to growing concerns regarding safety and increasing demand for heavy-duty vehicles. Hydraulic actuators have progressed from a working mechanical application to a completely automatic system. The engine actuator devices utilize the potential of modern engine

management by providing consistency and enhanced performance, lowering CO2 emissions. As a result, automotive hydraulic actuators are used more frequently in a variety of applications.

In comparison to electric actuators and most pneumatic actuators, hydraulic actuators are considered to provide a higher return on investment, in terms of strength for heavy-duty operations. The horsepower-to-weight ratio of hydraulic actuator motors is comparatively high to electric actuators. They have a great deal of force and produce a lot of power for their size. This makes them both cost-effective and efficient. Hydraulic energy is simple to hold and manage.

Many hydraulic controls are automated, but manual overrides can be built into hydraulics to allow an operator to control the actuator directly. Hydraulic actuators are still one of the key areas of focus for OEMs. They're looking to improve the safety and comfort of heavy-duty vehicles. For instance, in building sites, a truck raises a big cargo to deposit tons of sand. With the flow of oil regulated by the steering wheel, a hydraulic motor also assists in changing the direction of wheels.

#### Market Trends, Drivers, Restraints, and Opportunities

- Growing requirement for innovative hydraulic actuator products is spurring the market growth. This in turn, is encouraging major manufacturers to spend on R&D activities to leverage their market position.
- Increasing demand for high-quality functioning actuator components such as throttle actuator, brake actuator, and closure actuator is anticipated to propel the growth of the market.
- Rising demand for fuel-efficient vehicles is expected to stimulate the market growth.
- Increasing demand for comfort, particularly in passenger vehicles, is propelling the automotive hydraulic actuators market in the country

- High installation and maintenance cost can hamper the market growth.
- Ongoing technological advancements is expected to provide enormous prospects for industry players.

### Scope of the Report

The report on the Japan automotive hydraulic actuators market includes an assessment of the market, trends, segments, and regional markets. Overview and dynamics have also been included in the report.

Attributes Details

Report Title

Japan Automotive Hydraulic Actuators -Industry Analysis, Growth, Share,

Size Translational Forescapt

Size, Trends, and Forecast

Base Year 2021

Historic Data 2019–2020 Forecast Period 2021–2028

**Applications** (Throttle Actuators, Seat Adjustment Actuators, Brake

**Segmentation** Actuators, Closure Actuators, and Others) and **Vehicle Types** (Passenger

Cars and Commercial Vehicles)

**Country** Japan

Report Coverage Company Share, Market Analysis and Size, Competitive Landscape, Growth

Factors, and Trends, and Revenue Forecast

**Key Players Covered** 

in the Report

Robert Bosch GmbH, Continental, and Denso

# Japan Automotive Hydraulic Actuators Market Segment Insights:

#### Throttle actuator segment to account a major market share

Based on types, the market is segregated into throttle actuators, seat adjustment actuators, brake actuators, closure actuators, and others. The throttle actuator control (TAC) system monitors the throttle position using two throttle position sensors (TPS). The volume or amount of air that enters the engine through the driver's accelerator pedal is controlled by these mechanisms. The throttle kicker actuator can be controlled by both electronically and mechanically. The actuator opens the throttle slightly in a vacuum-operated mode to boost air/fuel flow.

The components that transform the compressed air force within a truck or trailer's air reservoir into a mechanical force is known as brake actuator. As the air passes through the actuator, it activates a relay valve, which converts the air pressure to physical braking force. The brake actuator is found in the rear brake component of the car. The pump motor, the accumulator,

the wheel cylinder, the linear solenoid valve, and the master cylinder pressure sensors are all part of the relay system.